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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/044,646	01/10/2002	Vikas Krishna	ARC920010031US1	8578
23334	7590	10/04/2005	EXAMINER	
FLEIT, KAIN, GIBBONS, GUTMAN, BONGINI & BIANCO P.L. ONE BOCA COMMERCE CENTER 551 NORTHWEST 77TH STREET, SUITE 111 BOCA RATON, FL 33487			PHAM, HUNG Q	
			ART UNIT	PAPER NUMBER
			2162	
DATE MAILED: 10/04/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/044,646

Applicant(s)

KRISHNA ET AL.

Examiner

HUNG Q. PHAM

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 20-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 20-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 04/25/2005 has been entered.

Response to Arguments

- Applicant's amendment of claim 20 with respect to the rejection under 35 U.S.C. § 112, second paragraph, has been fully considered. The rejection under 35 U.S.C. § 112, second paragraph, of claim 20 has been withdrawn.

- Applicant's arguments to the rejection under 35 U.S.C. § 102 with respect to the amended features of claims 20, 26 and 32 have been fully considered but they are not persuasive.

(a) *The modification files in Mahajan are not database records each with fields containing a single entry per field (sequence number, a problem identifier field, and a work history field) as recited for the independent claims of the present invention. Rather the modification files in Mahajan are not limited to one entry per field. Therefore, Mahajan is not accessing locally on a first database server, at least one database record in a first database", as recited for independent claims 20, 26, and 32.*

(b) *The Examiner states that the transactions A, C, R, and J in the modification files are predetermined values in a work history field and searched by sequence number. As stated above, the transaction letters as illustrated by FIG. 4 of Mahajan are for illustrative purposes only and not for identification purposes. Nowhere does Mahajan suggest, teach, or state that the transactions are predetermined values. A transaction, as taught by Mahajan, is only a representation of a sequence of operations. See Mahajan at col. 8, lines 8-12. This representation of a sequence of operations, i.e. transactions, is not predetermined values. For example, when changes to data occur, a client submits these changes to the server. The server then creates a modification file that is associated with the data group whose data has changed. The modification file includes these changes or transactions. As can be seen, the transactions merely reflect the changes to data submitted by client systems and are not predetermined values.*

...

Nowhere does Mahajan teach, anticipate, or even suggest "searching for at least one database record in the first database with a value in the work history field matching a predetermined value", as recited for claims 20, 26, and 32. Therefore, claims 20, 26, and 32 distinguish over Mahajan for at least this reason as well.

(c) *Mahajan does not teach, anticipate, or even suggest "using a sequence value within the sequence number field in the at least one database record in the first database, with the value in the work history field matching the predetermined value as a starting point for synchronization with the remote database server, wherein the sequence value in the sequence number field of the at least one database record is associated with the at least one database record", as now recited for claims 20, 26, and 32.*

(d) *Mahajan does teach anticipate or suggest "appending at least one new database record directly into the first database with a new value in the work history field matching the predetermined value".*

(e) *Mahajan does not teach, anticipate, or suggest "storing a new sequence number directly in a sequence number field of the at least one new database record In the first database, wherein the new sequence number is an increment of a final. sequence number of a final database record sent to the remote database".*

Examiner respectfully traverses because of the following reasons:

(a) As disclosed by Mahajan, Database Management System 100 accesses the appropriate modification files that correspond to the data groups a client has access (Col. 6, Lines 1-3), wherein a data group is associated with a series of modification files (Col. 5, Lines 3-4), and each modification file associates with a sequence number (Col. 6, Lines 24-27). As illustrated in FIG. 4, a modification file includes a sequence of transactions, each of which is identified by a unique global sequence number. Each transaction represents a sequence of operations 410 and each operation has a unique sequence number, such as OP1, OP2, OP3, OP4, and OP5, which indicate the order of execution of the operation within the transaction. Each transaction identifies the client computer system 16, on which it was originally executed as part of the transaction record. A client ID number 416 is associated with the transaction (FIG. 4, Col. 7, Line 63-Col. 8, Line 16).

As defined by Microsoft Press:

Database: A file composed of records, each containing fields together with a set of operations for searching, sorting, recombining, and other functions.

As seen, Database Management System 100 as *a first database server accesses locally a transaction entry as at least one database record in a modification file as first database, each transaction as database record includes a sequence number field (sequence number), a problem identifier field (operation number, e.g., OP1, OP2...), and a work history field (transaction field that includes operation).*

(b) As disclosed by Mahajan, modification files is analyzed to determine what data from the modification file 86 should be filtered, merged, deleted for synchronization (Col. 10, Lines 14-29). In order to filter data for synchronizing, Mahajan further discloses the step of *searching for at least one data record in the first database with client ID as a value in the work history field matching client ID of the client computer system 16 as a predetermined value* at FIG. 5B, Col. 10, Lines 19-35.

(c) As disclosed by Mahajan at Col. 6, Lines 30-36 and Col. 10, Lines 19-35, *sequence value within the sequence number field in the at least one data record in the first database with the value in the work history field matching the predetermined value are used as a starting point for synchronization.* Mahajan further discloses *the sequence vale in the sequence number field of the at least one database record is associated with the at least one database record* at Col. 6, Lines 24-27.

(d) As illustrated by Mahajan at FIG. 4, transaction A as *at least one new database record is appended directly into modification file 86 as the first database with client ID as a new value in the work history matching the client ID of the client computer system as the predetermined value.*

(e) As disclosed by Mahajan at Col. 6, Lines 23-45, the modification file of database management system 100 in FIG. 2 that was not previously transmitted to the client is associated with a sequence number greater than the sequence number of the

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last update. This technique performs the claimed *storing a new sequence number directly in a sequence number field of the at least one new database record in the first database, wherein the new sequence number is an increment of a final sequence number of a final database record sent to the remote database.*

- Applicant's arguments with respect to the rejection under 35 U.S.C. § 103 have been fully considered but they are not persuasive because of the reasons as discussed above.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 20, 26 and 32 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

As in claims 20, 26 and 32, the steps of

searching for at least one database record in the first database with a value in the work

history field matching a predetermined value,

using a sequence value within the sequence number field in the at least one data record in the first database with the value in the work history field matching the predetermined value as a starting point for synchronization with the remote database server...
appending at least one new database record directly into the first database with a new value in the work history field matching the predetermined value

were not described in the specification (applicants referred examiner to page 13, lines 9-22, page 6, lines 22-30 to page 7, line 1-3 and page 13, lines 9-22 as the description of these steps, however, the referred pages and lines do not sufficiently support the above claimed features).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 20, 21, 24, 26, 27, 30, 32, 33 and 36 are rejected under 35

U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Mahajan et al. [USP 6,226,650 B1].

Regarding claims 20, 26 and 32, Mahajan teaches a method of synchronizing remote database on a first database server (FIG. 1, server 18) networked to other database servers (FIG. 1, clients 16 A-C) containing collaborative database information records (Col. 4, Lines 26-29). The method comprises:

selecting at least one remote database server (FIG. 5A, Col. 10, Lines 21-24, a client database as remote database server is selected by an updated request);

accessing locally on a first database server, at least one database record in a first database, wherein the database record includes at least one field for each of a sequence number field, a problem identifier field, and a work history field (as disclosed by Mahajan, Database Management System 100 accesses the appropriate modification files that correspond to the data groups a client has access (Col. 6, Lines 1-3), wherein a data group is associated with a series of modification files (Col. 5, Lines 3-4), and each modification file associates with a sequence number (Col. 6, Lines 24-27). As illustrated in FIG. 4, a modification file includes a sequence of transactions, each of which is identified by a unique global sequence number. Each transaction represents a sequence of operations 410 and each operation has a unique sequence number, such as OP1, OP2, OP3, OP4, and OP5, which indicate the order of execution of the operation within the transaction. Each transaction identifies the client computer system 16, on which it was originally executed as part of the transaction record. A client ID number 416 is associated with the transaction (FIG. 4, Col. 7, Line 63-Col. 8, Line 16). As seen, Database Management System 100 as *a first database server accesses locally a transaction entry as at least one database record in a modification file as first database, each transaction as database record*

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includes a sequence number field (sequence number), a problem identifier field (operation number, e.g., OP1, OP2...), and a work history field (transaction field that includes operation);

searching for at least one database record in the first database with a value in the work history field matching a predetermined value (as disclosed by Mahajan, modification files is analyzed to determine what data from the modification file 86 should be filtered, merged, deleted for synchronization (Col. 10, Lines 14-29). In order to filter data for synchronizing, Mahajan further discloses the step of searching for at least one data record in the first database with client ID as a value in the work history field matching client ID of the client computer system 16 as a predetermined value at FIG. 5B, Col. 10, Lines 19-35);

using a sequence value within the sequence number field in the at least one database record in the first database with the value in the work history field matching the predetermined value as a starting point for synchronization with the remote database server, wherein the sequence value in the sequence number field of the at least one database record is associated with the at least one database record (as disclosed by Mahajan at Col. 6, Lines 30-36 and Col. 10, Lines 19-35, sequence value within the sequence number field in the at least one data record in the first database with the value in the work history field matching the predetermined value are used as a starting point for synchronization. Mahajan further discloses the sequence value in the sequence number field of the at least one database record is associated with the at least one database record at Col. 6, Lines 24-27);

sending to the remote database server each database record in the first database whose associated sequence number in the sequence number field is greater than the sequence value (Col. 6, Lines 30-36);

appending at least one new database record directly into the first database with a new value in the work history field matching the predetermined value (as illustrated by Mahajan at FIG. 4, transaction A as *at least one new database record is appended directly into modification file 86 as the first database with client ID as a new value in the work history matching the client ID of the client computer system as the predetermined value*);

storing a new sequence number directly in a sequence number field of the at least one new database record in the first database, wherein the new sequence number is an increment of a final sequence number of a final database record sent to the remote database (as disclosed by Mahajan at Col. 6, Lines 23-45, the modification file of database management system 100 in FIG. 2 that was not previously transmitted to the client is associated with a sequence number greater than the sequence number of the last update. This technique performs the claimed *storing a new sequence number directly in a sequence number field of the at least one new database record in the first database, wherein the new sequence number is an increment of a final sequence number of a final database record sent to the remote database*).

Regarding claims 21, 27 and 33, Mahajan teaches all of the claimed subject matter as discussed above with respects to claim 20, 26 and 32, Mahajan further discloses the step of *searching for a predetermined entry which does not include a time entry* (Col. 6, Lines 23-36).

Regarding claims 24, 30 and 36, Mahajan teaches all of the claimed subject matter as discussed above with respect to claims 20, 26 and 32, Mahajan further

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discloses the step of *sending to the remote database server with a second database schema that is different than a first database schema for the first database server* (FIG. 3A and 3C).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 22, 23, 28, 29, 34 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mahajan et al. [USP 6,226,650 B1] in view of Applicant Admitted Prior Art [Background].

Regarding claims 22, 28 and 34, Mahajan teaches all of the claimed subject matter as discussed above with respect to claims 20, 26 and 32, but fails to disclose the database record is sent for *customer service information*. However, in the background is the disclosure of a help desk application for customer service. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the Mahajan method by using the technique as discussed for storing customer service information in order to maintain synchronization among a server and a help desk client.

Regarding claims 23, 29 and 35, Mahajan teaches all of the claimed subject matter as discussed above with respect to claims 20, 26 and 32, but fails to disclose the database record is sent for *a help desk application*. However, in the background is the disclosure of a help desk application for customer service. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the Mahajan method by using the technique as discussed for storing customer service information in order to maintain synchronization among a server and a help desk client.

Claims 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mahajan et al. [USP 6,226,650 B1] and Applicant Admitted Prior Art [Background] as applied to claims 24 above, and further in view of Rackman [USP 5,903,646].

Regarding claim 25, Mahajan and Applicant Admitted Prior Art, in combination, teach all of the claimed subject matter as discussed above with respect to claim 24, but does not disclose *the database record from the first database server with the first database schema that has been previously designated as non-confidential*. Rackman teaches a technique of designating a document as confidential and non-confidential (Rackman, Col. 3, Line 57-Col. 4, Line 40). It would have been obvious for one of ordinary skill in the art at the time the invention was made to designate a document as non-confidential and confidential in order to secure access to a database.

Claims 31 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mahajan et al. [USP 6,226,650 B1] in view of Rackman [USP 5,903,646].


Regarding claims 31 and 37, Mahajan teaches all of the claimed subject matter as discussed above with respect to claims 26 and 32, but does not disclose *the database record from the first database server with the first database schema that has been previously designated as non-confidential*. Rackman teaches a technique of designating a document as confidential and non-confidential (Rackman, Col. 3, Line 57-Col. 4, Line 40). It would have been obvious for one of ordinary skill in the art at the time the invention was made to designate a document as non-confidential and confidential in order to secure access to a database.

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to HUNG Q. PHAM whose telephone number is 571-272-4040. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JOHN E. BREENE can be reached on 571-272-4107. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


HUNG Q PHAM
Examiner
Art Unit 2162

September 21, 2005


SHAHID ALAM
PRIMARY EXAMINER